



Aashutosh Kumar Hirnotia
PG (II Year I Semester)
M.Tech. Water Resources Development
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Registration No: 22548001/2024



Area of Interest

River Engineering, Data Analysis, Remote Sensing & GIS

Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2023	M.Tech. 1st Year	Indian Institute of Technology, Roorkee	7.778
2019	Graduate (UG)	Indian Institute of Technology, Roorkee	7.059
2014	Intermediate (Class XII)	Saraswati Bal Mandir Senior Secondary School, Hapur	90.40 %
2012	Matriculate (Class X)	Saraswati Bal Mandir Senior Secondary School, Hapur	10.000

Experience

Project Associate - I | National Institute of Hydrology, Roorkee February 2022 - June 2022

- Worked on a 10 months project titled "Sustainable Ground Water Management Plan for 4 Industrial Districts of Western U.P. as a Junior Research Fellow for 4 months.
- Prepared thematic layers, maps on GIS software packages and charts of different datasets collected and analyzed the available reports of different central and state agencies relevant to the project and our study area.
- Worked on gathering relevant data for the projects such as meteorological data, surface water and ground water availability data, hydrogeological data from online sources for the districts of Hapur, Bulandshahar, Ghaziabad, Gautam Buddha Nagar.

Engineer (Civil) | Floodkon Consultants LLP June 2021 - September 2021

- Worked on the Inception Report of Hydrogeological Study of Bongaigaon Thermal Power Plant (3x250 MW) in Assam.
- Worked on the procurement of the different data required for Irrigation Benchmarking of three Medium Irrigation Projects in Tripura.
- Worked on the report of Area Flood Drainage Study for the 500 KTPA Copper Refinery Plant of Adani Enterprises Limited in Mundra, Kutch, Gujarat.
- Analyzed the hydrogeological data of pumping tests for Groundwater Sustainability Study of Gujani Mines in Nigeria.
- Mentorship of interns doing final year B. Tech internship under Floodkon Practicum Program for 3 months duration.

Internships

Intern - Customer Experience Improvement Team | Wakefit Innovations Pvt. Ltd. March 2021 - June 2021

- Worked for the improvement of CSat (Customer Satisfaction) Score and also for increasing the Customer Delight Experience to develop the bond with the customer from the beginning.
- Analyzed the RCAs responses of the DSat and worked on the projects associated with the issues of the Logistics and Operations team to increase the CSAT score.

Hydraulic Engineer Trainee | Floodkon Consultants LLP May 2018 - July 2018

- Contributed to the design of Intake Structure of Thermal Power Plant by working on its physical model.
- Measured and analyzed the flow data around the intake well using Acoustic Doppler Velocimeter and WinADV to study the sediment deposition around the intake well and suspended sediment load in intake water.
- Contributed to the design of Hopper type Desilting arrangement and worked on the scour depth estimation of Gravel Bed river and designing of Cutoffs in the upstream and downstream section of barrage.
- Learned the use of HEC-RAS, ArcMap, ANSYS softwares by doing hydraulic modelling of Kosi River Bridge.

Summer Internship on Self Compacting Concrete | Department of Civil Engineering, IIT Roorkee May 2017 - June 2017

- Worked on the fresh and hardened properties of Self Compacting Concrete (SCC).
- Observed rheology and thixotropy of different SCC mixtures having varied amounts of recycled aggregates and mineral admixtures using Rheometer.
- Analyzed the Compressive Strength, Split Tensile Strength and Flexural Strength of beams, cylinders and cubes casted by those SCC mixtures.

Projects

B. Tech Project | Dept. of Civil Engineering, IIT Roorkee July 2018 - May 2019

- Worked on the design of an Airport at a location near Laksar, Haridwar (Uttarakhand).
- Site selection was done by using ArcMap comparing different sites datasets like land use, land cover, soil map, road and railway network, DEM using AHP (Analytical Hierarchy Process) technique.
- Contributed to the project by designing Hydrological and Hydraulic aspects/parameters with StormCAD.

Analysis and Design of Academic Building of H.P.T.U | Dept. of Civil Engineering, IIT Roorkee January 2018 - April 2018

- Designed a RCC Building moment resisting framework according to the architectural design provided.
- Prepared a 3D model of the building and applied 13 load combinations using E TABS.
- Applied checks for seismic performance of the model according to IS standard.

- Have observed and analyzed the dynamics of changes in bed level at a cross-section of a river affected by bed mining.
- Worked on developing a technique for reconstructing the past river cross sections of a Himalayan River under limited data availability.
- Will now start setting up an efficient hydraulic model and will quantify the hydraulic behavior of the mining affected river in its downstream flood plains.

Awards / Scholarships / Academic Achievements

- Won Silver Medal in Inter-IIT Cultural Meet 2017 held at IIT Kanpur for Stage Play Competition.
- Won Silver Medal in Inter-IIT Cultural Meet 2018 held at IIT Roorkee for Short Movie Competition.

Skills

Computer languages	C++, SQL
Software Packages	ArcGIS, MS Office, HEC-RAS, MIKE+
Additional Courses	Small Hydro Power Development, Rural Governance & Finance, Introduction to Macroeconomics
Languages Known	Hindi (SRW), English (SRW)

Positions of Responsibility & Extra Curriculars

Additional Secretary & Member | Dramatics Section, IIT Roorkee September 2015 - May 2019

- Have performed as an actor in 6 plays and managed production of over 15 plays, Music Director for 1 Stage play.
- Handled the budget of Section and managed the team of more than 45 members.
- Organized the Inter Bhawan Monologue and Skit Competition 2019 and Friends of Section 2019.

Executive Member | Institute Alumni Relation Cell, IIT Roorkee August 2016 - May 2019

- Worked under the Dean of Resources and Alumni Affairs (DORAA) and coordinated the work between Alumni Association, IIT Roorkee and our team during Alumni Meets.
- Worked on the revamp of Alumni Card, its new design, online application through DORAA webpage and its distribution to more than 1500 graduating students during Annual Convocation 2017 & 2018.
- Led the production team of Class Song "Udd Gaye" for 2018 Batch capturing more than 800 students, handling its logistics and permissions work and managing time schedules of shoot and final yearites availability. Video garnered over 540k views and 12k likes on Youtube.

References

Dr. Mohit Prakash Mohanty

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